



APPENDIX A

VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Amended) A method of specifically detecting [the presence or absence of] a strain of *Bacillus anthracis* containing a surface array protein (SEQ ID NO:1) in a test sample, the method comprising:

contacting a test sample with a [capture reagent] first antibody that can specifically bind to *Bacillus anthracis* surface array protein (SEQ ID NO:1) [that can bind to a *Bacillus anthracis* surface array protein], wherein the first antibody [capture reagent] forms a complex with the surface array protein if the surface array protein is present in the test sample; and

detecting whether the surface array protein is bound to the first antibody [capture reagent] with a second antibody that binds to the surface array protein, wherein the presence of surface array protein is indicative of the presence of *Bacillus anthracis* in the test sample.

5. (Amended) The method of claim 1 [4], wherein the first or second antibody is a [recombinant] recombinantly produced antibody.

6. (Amended) The method of claim 5, wherein the first or second antibody is a [recombinant] recombinantly produced polyclonal antibody.

7. (Amended) The method of claim 1 [5], wherein the first or second antibody is a monoclonal antibody.

10. (Amended) The method of claim 1, wherein the test sample is not cultured prior to contacting with the first antibody [capture reagent].

~~11. (Amended) The method of claim 1, wherein the first antibody~~
[capture reagent] is immobilized on a solid support.

13. (Amended) The method of claim 11, wherein the first antibody [capture reagent] is immobilized on the solid support prior to contacting the first antibody [capture reagent] with the test sample.

19. (Amended) The method of claim 1 [17], wherein the second antibody [detection reagent] binds to a different epitope of the surface array protein than does the first antibody [capture reagent].

20. (Amended) The method of claim 17, wherein the second antibody [detection reagent] comprises a detectable label.

22. (Amended) A kit for detecting the presence or absence of *Bacillus anthracis* in a sample, the kit comprising:

a solid support upon which is immobilized a a first antibody that can specifically bind to [capture reagent that can bind to] a surface array protein SEQ ID NO:1) of *Bacillus anthracis*; and

a second antibody [detection reagent] which binds to the surface array protein.

25. (Amended) The kit of claim 22 [24], wherein the first or second antibody is a recombinant polyclonal antibody.

27. (Amended) The kit of claim 22 [24], wherein the first or second antibody [capture reagent] is a mixture of monoclonal and polyclonal antibody preparations.

APPENDIX B
CLAIMS PENDING WITH ENTRY OF AMENDMENT

1. (Amended) A method of specifically detecting a strain of *Bacillus anthracis* containing a surface array protein (SEQ ID NO:1) in a test sample, the method comprising:

contacting a test sample with a first antibody that can specifically bind to *Bacillus anthracis* surface array protein (SEQ ID NO:1), wherein the first antibody forms a complex with the surface array protein if the surface array protein is present in the test sample; and

detecting whether the surface array protein is bound to the first antibody with a second antibody that binds to the surface array protein, wherein the presence of surface array protein is indicative of the presence of *Bacillus anthracis* in the test sample.

3. The method of claim 1, wherein the *B. anthracis* strain is encapsulated.

5. (Amended) The method of claim 1, wherein the first or second antibody is a recombinantly produced antibody.

6. (Amended) The method of claim 5, wherein the first or second antibody is a recombinantly produced polyclonal antibody.

7. (Amended) The method of claim 1, wherein the first or second antibody is a monoclonal antibody.

8. The method of claim 1, wherein the test sample is collected from a site of suspected or threatened anthrax contamination.

9. The method of claim 8, wherein the test sample is collected using a cyclonic collection device.

10. (Amended) The method of claim 1, wherein the test sample is not cultured prior to contacting with the first antibody.

11. (Amended) The method of claim 1, wherein the first antibody is immobilized on a solid support.

12. The method of claim 11, wherein the solid support is a microtiter dish.

13. (Amended) The method of claim 11, wherein the first antibody is immobilized on the solid support prior to contacting the first antibody with the test sample.

14. The method of claim 1, wherein the method can detect *B. anthracis* at concentrations as low as about 10,000 cfu/ml.

15. The method of claim 14, wherein the method can detect *B. anthracis* at concentrations as low as about 5,000 cfu/ml.

16. The method of claim 15, wherein the method can detect *B. anthracis* at concentrations as low as about 1,800 cfu/ml.

19. (Amended) The method of claim 1, wherein the second antibody binds to a different epitope of the surface array protein than does the first antibody.

20. (Amended) The method of claim 17, wherein the second antibody comprises a detectable label.

21. The method of claim 20, wherein the detectable label is selected from the group consisting of a radioactive label, a fluorophore, a dye, an enzyme, and a chemiluminescent label.

22. (Amended) A kit for detecting the presence or absence of *Bacillus anthracis* in a sample, the kit comprising:

a solid support upon which is immobilized a first antibody that can specifically bind to a surface array protein (SEQ ID NO:1) of *Bacillus anthracis*; and
a second antibody which binds to the surface array protein.

23. The kit of claim 22, wherein the solid support is a microtiter dish.

25. (Amended) The kit of claim 22, wherein the first or second antibody is a recombinant polyclonal antibody.

26. The kit of claim 24, wherein the first or second antibody is a monoclonal antibody.

27. (Amended) The kit of claim 22, wherein the capture reagent is a mixture of monoclonal and polyclonal antibody preparations.

28. The kit of claim 22, wherein the kit further comprises written instructions for using the kit to determine whether a test sample contains *B. anthracis*.

29. The kit according to claim 22, wherein the kit further comprises a positive control that comprises a polypeptide that comprises an antigenic determinant of a *B. anthracis* surface array protein.